

corporatization of the American educational system is a problem, and the university infrastructure of this country needs major reworking, but it could be argued that the route taken by 3Cs is more likely to generate results than the actual protests and occupations. As I wrote this review, news of a protest-turned-street-fight between activists and police at UC-Berkeley began to crop up. This development is unlikely to garner much sympathy from the American public towards the protesters' cause—be it tuition hikes or a living wage for university workers. 3Cs uses knowledge, facts, numbers, and images to clearly state problems and goals in a way that young students, recently out of high school, can understand and use as a basis for discussing effective solutions. It also operates in a way that uses words instead of unrest, and which allows 3Cs to have an active voice while still being able to come across persuasively to those who may be put off by marches and protests.

UNC 1960–2009: A People's History

The “People's History” timeline of UNC political activism puts 3Cs in historical context as part of a long line of on-campus student/worker engagement. The history begins with the first black undergraduates admitted to UNC, and ends on a wishful-thinking 2012 entry of “UNC-CH re-opens as a free university under worker control.” The timeline runs entwined with American social history: civil rights protests led into Vietnam War demonstrations; women's rights and gay rights in the 70s; protests against apartheid in the 80s; and the past 20 years dealing with workers' rights and the Iraq War. Both the Global University Struggles and the People's History Timeline continue as interactive maps on the 3Cs website (<http://www.countercartographies.org/>), where one can also download the first edition of disOrientation.

Conclusion

Taking the politics out of the maps does not leave you with much in terms of content or new mapping technologies. According to the group, the guide was created using Adobe Illustrator, Inkscape, ArcGIS, the Google API, and Circos, with the final layout produced in Illustrator and the individual maps being designed in Inkscape and Illustrator. The maps in this product exist as a means to political ends. disOrientation² could have been all text, or it could have been text with graphs or other images; the maps complement the text and not the other way around. They are a visualization of the political content, but whatever their position, they are effective and worth viewing. disOrientation² may interest geography students and push them towards politics, or may push political science students or student activists towards geography and cartography.

EVERYTHING SINGS: MAPS FOR A NARRATIVE ATLAS



By Denis Wood.

Los Angeles: Siglo Press, 2010. 112 pages. \$28.00, softcover with sewn binding.
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Review by: Tom Koch, University of British Columbia

“Everything sings ... for us.”

Denis Wood makes maps. Who knew?

Long-time, some-time NACIS member Denis Wood is well known as a critic, curator, historian, and theoretician of maps. Wood has often written about maps, from his 1992 *The Power of Maps* through his (and John Fels') *The Natures of Maps* of 2008, but despite co-authoring *Making Maps* with John Krygier, does he actually ... *make* maps? The whisper had always been that Denis Wood only writes about maps while we, the “real” NACIS members, make them. He is like the literary critic whose novelistic efforts are never published, and certainly never seen. So it has been widely suspected that Wood, and by extension a range of academics interested in cartography, is really just a voyeur in the world of *real* mapmakers whose working lives are dedicated to the business of making maps.

The great surprise of Wood's new book, *Everything Sings*, is that he can indeed make maps of real beauty and power, maps redolent with content.

The more than 50 maps in *Everything Sings* build toward a narrative of Boylan Heights, the Raleigh, NC, neighborhood where Wood lived and worked for 23 years. Their genesis, he writes in the introduction, was a design studio course he taught for landscape architecture students at North Carolina State University in Raleigh. “I used mapping as a way of selectively focusing their attention on those aspects of the landscape that, in the instrumentality of their training as future professionals... they were apt to overlook” (p. 14).

This was mapping for professionals in training, albeit not cartographic professionals, who could be expected to use maps in their work. The studies were directed by someone trained in the old days of 1960's handiwork cartography, of mapmaking before the desktop computer and GIS became ubiquitous. The neighborhood scale of the atlas encouraged student fieldwork; the independent collection of data that could be used to craft a map of this or that phenomenon. Not coincidentally, the scale was one the students would, as landscape architects, later engage in their work.

This American Life radio commentator Ira Glass, in his introduction to *Everything Sings*, praises Wood's narrative atlas for the impracticality of the maps it presents, the non-commercial, unnecessary, exuberantly superfluous celebration of its imaging. Most maps, he writes, are just "dull salarymen who clock in early and spend their days telling you where stuff is with unrelenting precision. They never vary an inch from these appointed rounds" (p. 6). According to Glass, Wood's maps are...different.

Glass is half-right in this. True, the gas station map and its progeny, Google Maps and their kind, are pretty dull and largely devoid of a human face. That Wood's maps are different does not mean they are superfluous, however. Wood's studios demanded that students think about the neighborhood as a complex environment in which impersonal, physical structures operate together to stage the reality of residential life. The studios were also about data, about teaching students to not accept passively but instead to think clearly about the data needed to map one or another aspect of a region, large or small. The resulting maps of *Everything Sings* are real working maps treating common cartographic subjects. It is their point of view, their argument in a cartographic frame, that makes them *seem* different.

The maps for this narrative atlas were produced not simply in the academic studio but also in that of the working mapmaker. Wood served as project director, supervisor, and in some cases mapmaker. All the maps are based on data collected by students in Wood's studio course. Some of the maps are entirely Wood's work, based on that data, and others are Wood's refinements of maps produced by the students in the 1980s. Still others are more or less student work reformed in Adobe Illustrator® for this volume. The resulting map set reflects a range of media, from the old IBM compositor to modern graphics software. The provenance of each, and the technology of its manufacture, is carefully noted in the appendix.

There are, in a partial list, maps of the neighborhood's streetlight (but not streetlights) and its tree stock (trees by size and by age, disfigured trees, and autumn foliage); maps of the streets themselves (and another of their alleyways) and of resident calls to police (distinguished by call type, including burglary, nuisance, robbery, etc., and frequency). There is a contour map of Boylan's Hill, the central geographic feature of the area, and another of the sewer and gas lines that run beneath the houses, streets, and stores that have been imposed upon it. Mapped, too, are the mailman's daily route and that of the paperboy. There is a map of the bus routes and another of the assessed value of houses in Boylan Heights, and many other maps.

For the landscape architect there are maps of the broken tree canopy, of viewsheds, and of night light across the

neighborhood; elements those professionals might need to know how to measure and map in a professional career. The streets are distinct from the alleyways behind the houses that are travelled weekly by the garbage disposal trucks whose drivers (and certainly their supervisors) have mapped the routes themselves. There, in another map, are the backyards and the power poles and the plantings that promote or impede sightlines affecting the aesthetic that is a landscape architect's bread and butter.

The subjects are not fanciful but mundane. Most have been mapped, time and again, by one or another city supervisor or corporate router. These maps, though, seem "impractical," because the mapped perspective, that chosen by the mapmaker, is not denied but embraced. The idea was to map the city as an environment in which people lived, studied, and worked, rather than as an index of artifacts (streets, street lamps, houses, etc.) whose relation to the lived life is incidental. After all, if your business is landscape architecture, designing the space in which people will live or work, the impractical becomes practical indeed.



Figure 1

The atlas's genius lies in its balancing of the general and the personal, the local and specific. The maps that seem merely artistic are in fact the end point of a series of maps that begin with Boylan Heights as a geographic and political entity and then focus progressively upon the particulars of the lived world.

Thus we have Glass's praise for *Pools of Light*, a map of the illumination of streetlights in the neighborhood (Figure 1). And at first glance it seems...uselessly artistic. By removing the lampposts and mapping instead the light they present a kind of nightscape where darkened areas reside. "Our inefficient map," Wood writes, "concentrated on a single subject, and, rather than lamp posts, it brought the pools of light into view" (p. 15). This is an atlas, however, in which no map stands alone but instead contributes with other maps to a presentation of the neighborhood's streets and lightening. Its meaning comes from that association. The seemingly impractical pools of light are explicated by another map of the light at night on Cutler Street. In it, broad blobs of streetlight

are interpolated to create a surface of variable intensity. Its creation required 151 light meter readings taken on the street, the sidewalk, and the front of the houses surveyed. In this way the general pooling of night illumination is qualified, for a single street block, by the real variance in lighting that exists along it (Figure 2).

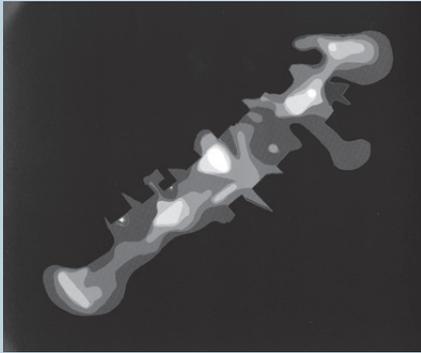


Figure 2

A map of variant luminescence is anything but useless. For the landscape architect it speaks to the locations where a Japanese lantern or other nightlight might be installed to increase back or front yard ambiance. For the police it reveals the shadowed spaces where, perhaps, burglars may lurk. With the companion maps of alleyways, trees, and streets, the map takes on a power of association whose purpose is not direct (this is not a map made for a single project) but whose potential is real.

And as a narrative, it evokes memories of other streets in other cities, of experiences of light and dark in the city generally. It reminded me of my trials as a child of eleven walking eight blocks home from band practice in Buffalo, NY. It took perhaps twenty minutes but seemed like forever along streets of variable lighting where terror lived in the dark. There were dogs, too, at some homes (usually those with least light), that would rush to the sidewalk and nip at me as I scurried along in fear. Hurrying through each pool of dark along my homebound route, I would find relief in each oasis of welcome light. Where a streetlight was burnt out and dark I would cross the street, trying to keep the frightening sway of tree branches in the night at bay. Even at that age they were still sometimes monstrous to me. In my mind was a landscape just like this, one of dark and light to be navigated. Of course, I told no one how much I hated the walk, because all would have said I was too old for such fears.

Practical Things

The first purpose of Wood's studio was to find a way to teach students not simply to see, but to perceive. It demanded a shift from the passive receipt of data collected by others to the active consideration of an environment, in a manner that could be mapped. Mapping was the medium, in other words, through which Wood wanted to teach a way of seeing the

landscape. The exercise demanded discussion (that is what studios are for), then fieldwork, for each map. Rejected as insufficient from the start was the typical, impersonal inventory of artifacts we typically give to cartography students, as if that inventory (of trees, street lamps, house values, etc.) said everything they would ever need to know about a subject. This is not to say that kind of data, and that kind of map, is unimportant, only that they are insufficient.

In the atlas are inventory maps, of course; fairly straightforward maps of the geography and the streets of Boylan Heights. There is, for example, a map of assessed house values, its contours interpolated across a 281-cell grid based on the assessed value of 333 residential lots. It's an OK map but somehow empty, because the streets one expects to see beneath the contour lines are absent. But the house value map gains meaning in its association with a map of the streets and, in the next map, of residences mentioned over an eight-year period in the Boylan Heights Restoration and Preservation Association newsletter.

The "base map" of streets is set aside from these mappings to remove the sense of normalcy, to emphasize the subject at hand. It is not that the streets are not mapped, but that they stand alone as but one component in the real life of the neighborhood. We see them again where they are important, in the time-distance maps of the local paperboy's daily route and that of the supervisor who drops off the newspapers to each newsboy in his district.

The point (and this is what atlases do) is to focus on elements of the neighborhood that together build a subject from a set of constituent maps of the botanical, economic, cosmographic, geographic, residential, and social landscapes. Here we have the Wood of yore, the guy who since the 1960s has railed against the military-industrial history of cartography, and more generally, the "repulsive instrumentalism" of the craft. Buried in the technologies of mapping, we were taught to divest ourselves of a concern for the quality and nature of the data we were given to map. We mapped what we were told to map, and we were coached to divest ourselves of a moral responsibility for the use others might make of the maps we made.

The distancing of student from subject, of professional from the results of his or her work, is what Wood has cavilled against for 40 years. In this his critique is general (you should hear him about geographers!). But in cartography this is the Wood who knows and despairs at the mapmaker's history, for example, of redlined maps whose sole purpose since the 1930's has been to deny mortgages or insurance to the poor, and especially African-American poor.

The scale of the atlas is the scale of landscape architecture, and the intensely local perspective of the craft. The content evoked is anything but ephemeral, however. It insists upon the human experience of being and seeing, of living actively within a community that is, the atlas says, an accumulation of structures at once economic and political and social. Indeed, if there is one thing lacking from this atlas it is the overt political overlay of calls to and from local representatives in city, state, and federal office. I suspect the number of letters to representatives would mirror the economic contours of the area. I expect that the political representatives must live in areas of higher home value, greater lighting, etc. Alas, that is a map we did not get, but one whose contours we can interpolate from the others.

Whether one sees the maps of this atlas as “useful,” “insightful,” or simply good teaching, it is important to note the cartographic excellence of the maps themselves. There is real technical mastery here, for example use of a pochoir brush (a round, flat ended, stenciling brush) to create the pools of light in the streetlight map. The real brilliance, however, lies, for me, in the insistence on the mapmaker’s role as a data gatherer, as a field worker. Eight years of newsletters were culled to create the location map of the local preservation association; 333 residential lot assessments were used to create a contouring of home values. For the mapping of the local tree stock (and thus of the canopy they create and its effect on neighborhood lighting), 1,171 trees and twenty-four tree clusters were inventoried and mapped. Each map in this atlas represents a piece of fieldwork whose data was collected to argue some element of the neighborhood. It is, I suspect, that insistence on the relationship between data gathering and data mapping in service of a dense, localized vision of a place that transforms what Glass describes as a mundane salaryman map into the magical and powerful.

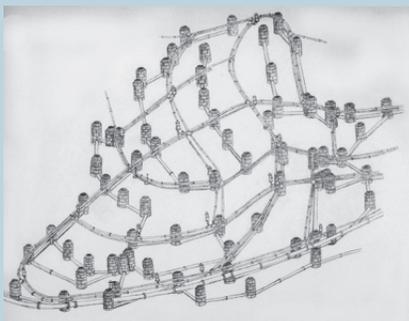


Figure 3

The map of water, gas, and sewer lines is an example of the transformation that occurs when the pedestrian is taken as exceptional, when the data treated as anything but commonplace (Figure 3). Imagine this as a mapping project in a GIS certification course using, say, ESRI’s ArcGIS®. There the question would be one of relative colors overlaid upon a “base map” of the district, one in which the lines would be distinguished in some neutral

symbolization. Those maps have their uses but all present an “unseen infrastructure” as if they were, well, lines on the map.

Wood’s map speaks to the importance of sewage and its disposal, and the prominence of it in our lives. It overlays this with the ubiquity of municipal water and the way we take it for granted. To this is added the lines that carry gas to homes for cooking and heating. For residents, each of these services looms large in daily life, and larger, still, when the system breaks down: when sewage seeps from a broken pipe or a gas leak blows up a house. Implied but not stated in the map is the critical importance of the infrastructure in the lived-in place, one in which Wood and his students were not merely voyeurs but residents.

If one goal was to teach students to gather data rather than mindlessly accept the data they are given, the studios Wood taught are, or should be, a model. If a goal of the studio in which this atlas was born was to demonstrate a range of cartographic techniques to craft a set of maps of a city neighborhood, then the result was a resounding success. The shocking thing, at least to me, is that it has taken almost thirty years for the publication of the atlas.

For the working mapmaker the result teaches several lessons. First, it empowers a sense of possibility, of symbolization beyond the palette of this or that GIS, and perhaps what has been lost in the transition to the computerized map graphic. Second, it insists upon the primacy of data and its collection, and of its importance in the mapped argument that results in even the most mundane projects. The secret of the atlas is in its data collection in service of an idea: the mapping of place. To the extent that mapmakers passively accept the data they are given, and see its presentation as “just data,” they limit the potential of what they are asked to evoke. Finally, plate after plate of the atlas insists upon the narrative nature not simply of atlases, of the piling of image and subject between pages, but of the human nature of the subjects mapmakers typically depersonalize as “natural.”

“My employer doesn’t want that kind of thing,” the mapmaker says. Maybe not. But maybe he, or she, would want it if he knew it was possible; maybe the limits of the craft in its impersonality lie in us and not in the powers that be.